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Humphrey

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[54] **VARIABLE ANAMORPHIC LENS AND METHOD FOR CONSTRUCTING LENS**

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[51] **Int. Cl.**..... **G02b 3/04,** G02b 3/10, G02b 13/08
[58] **Field of Search**..... 350/189, 181; 351/169

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[57] **ABSTRACT**

An anamorphic lens is disclosed which generates variable cylindrical lens power and variable cylindrical lens rotational alignment over incremental viewpoints chosen through its surface. Cylinder power and rotation is a function of the displacement distance and angle of a selected viewpoint segment from a neutral viewpoint segment through the lens. The disclosed lens element finds a preferred use in confronting relation to an identical lens element having complementary curvature. When identical lens elements are confronted, so as to provide an optical path of view through overlapping portions of the confronted lens elements, translational displacement of the confronted elements provides the same cylindrical lens power and cylindrical lens rotation over the entirety of the overlapped lens elements. Simplified methods of manufacturing the complex lens surface are disclosed.

6 Claims, 12 Drawing Figures